

New claims 19 and 23 to 26

19. A process for the preparation of a flame-resistant aminoplast resin system as claimed in at least one of claims 1 to 18, characterized in that
- a) a modified aminoplast resin solution or aminoplast resin suspension is prepared from an aminoplast former, a carbonyl compound and a C₁-C₄-alcohol at pH = 2 to 7, a temperature of from 40 to 160°C and a pressure of from 0 to 5 bar and a reaction time of from 5 to 300 minutes,
 - b) after the pH has been made alkaline, the modified aminoplast resin solution or aminoplast resin suspension is concentrated by distilling off the solvent at from 50 to 180°C and from -1 to 0 bar and in a residence time of from 1 to 120 minutes to give a substantially solvent-free aminoplast resin melt,
 - c) the substantially solvent-free aminoplast resin melt is reacted at a temperature of from 130 to 250°C and from -1 to 0 bar and in a residence time of from 0.5 to 10 minutes in an extruder or kneader for pre-condensation and conditioning, the addition of at least one compound enclosed by a capsule wall material, i.e. present in encapsulated form, being effected during or after step a) and/or during or after step b) and/or during or after step c), whereupon
 - d) the flame-resistant aminoplast resin system is compounded and discharged.
23. The use of a flame-resistant aminoplast resin

- 5 system as claimed in at least one of claims 1 to 18 for the preparation of hybrid resin systems, the hybrid resin systems being prepared by mixing and/or chemical reaction of the flame-resistant aminoplast resin systems with modified and/or unmodified melamine-formaldehyde resins, epoxy resins, polyurethane resins, unsaturated polyester resins and/or alkyd resins as melts in a kneader, mixer or extruder.
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- 15 24. The use of a flame-resistant aminoplast resin system as claimed in at least one of claims 1 to 18 in the form of granules and/or powder as compression molding resin or as injection molding resin.
- 20 25. The use of a flame-resistant aminoplast resin system as claimed in at least one of claims 1 to 18 for the production of a composite material, a substrate material being coated with the flame-resistant aminoplast resin system in powder form and/or the aminoplast resin system being melted and the substrate material being drawn through the resin melt, whereupon a pre-condensation step in
- 25 the range of about 110-250°C for a duration of about 1-10 minutes is effected, whereupon the storable prepreg obtained is subjected to shaping with a temperature increase and is cured thereby.
- 30 26. The use of a flame-resistant aminoplast resin system as claimed in at least one of claims 1 to 18 for pipes, sheets, profiles, injection molded parts or fibers, as a curing agent or crosslinking agent in powder coating systems or for the
- 35 production of flame-resistant shaped articles.